ABSTRACT

A method of designing a magnetic structure for providing a monotonic static magnetic field for magnetic resonance analysis. The method comprises: selecting a first geometry defining a volume-of-interest and selecting a magnetic field query, which is defined on a plurality of coordinates within the first geometry, the magnetic field query being monotonic. The method further comprises selecting a second geometry defining the magnetic structure and calculating a remanence distribution within the second geometry, by using the first geometry, the second geometry and the magnetic field query.